UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,488	10/29/2003	Bernard Cuenoud	4-20890C	7737
75074 7590 12/07/2009 NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, INC. 220 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139			EXAMINER	
			ANGELL, JON E	
CAMIDRIDGE, MA 02139			ART UNIT	PAPER NUMBER
			1635	
			MAIL DATE	DELIVERY MODE
			12/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

J. E. A  The MAILING DATE of this communication appears of Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SE WHICHEVER IS LONGER, FROM THE MAILING DATE OF	ANGELL  The cover sheet with t	(S) OR THIRTY (30) DAYS, N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
J. E. A  The MAILING DATE of this communication appears of Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SE WHICHEVER IS LONGER, FROM THE MAILING DATE OF	ANGELL  The cover sheet with t	1635 correspondence address (S) OR THIRTY (30) DAYS, N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
The MAILING DATE of this communication appears of Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SE WHICHEVER IS LONGER, FROM THE MAILING DATE OF	THE COVER Sheet with the Country of the COVER SHEET TO EXPIRE 3 MONTH(FINE THIS COMMUNICATION on event, however, may a reply be tired will expire SIX (6) MONTHS from the application to become ABANDONE is communication, even if timely filed.	correspondence address  S) OR THIRTY (30) DAYS,  N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SE WHICHEVER IS LONGER, FROM THE MAILING DATE OF	ET TO EXPIRE 3 MONTH( F THIS COMMUNICATION TO event, however, may a reply be tire and will expire SIX (6) MONTHS from the application to become ABANDONE this communication, even if timely filed	(S) OR THIRTY (30) DAYS, N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
WHICHEVER IS LONGER, FROM THE MAILING DATE OF	THIS COMMUNICATION to event, however, may a reply be tirt and will expire SIX (6) MONTHS from the application to become ABANDONE his communication, even if timely filed	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>03 August 2</u>	nna					
2a) This action is <b>FINAL</b> . 2b) This action						
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in accordance with the practice and Expans adapte, 1000 c.b. 11, 100 c.c. 210.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-60</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from	n consideration.					
5) Claim(s) is/are allowed.	· · · · · · · · · · · · · · · · · · ·					
S)⊠ Claim(s) <u>1-60</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election	Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate				

Application/Control Number: 10/696,488 Page 2

Art Unit: 1635

#### **DETAILED ACTION**

The amendment filed 8/3/2009 is acknowledged and has been entered.

Applicant's arguments are addressed on a per section basis. The text of those sections of Title 35, U.S. Code not included in this Action can be found in a prior Office Action. Any rejections not reiterated in this action have been withdrawn as being obviated by the amendment of the claims and/or applicant's arguments.

Claims 1-60 are now pending and are examined herein.

### **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 1635

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,670,468 (hereafter "the '468 patent".

With respect to the claimed products, although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '468 patent are drawn to a method of making the instantly claimed oligonucleotide derivative. The method of making the oligonucleotide derivative would result in synthesis of the instantly claimed product. Furthermore, the '468 patent defines the product(s) made by the patented methods, and the product(s) made by the patented method are encompassed by the instantly claimed product(s). Therefore, method of making the oligonucleotide derivative (as indicated in the '468 patent) is not patentably distinct from the oligonucleotide derivative made by said process (and which is now claimed in the instant application). Similarly, the '468 patent further defines the products

made by the patented method as being useful in oligonucleotides for modulating expression of a target protein or RNA molecule in a cell, including for the therapeutic treatment of a pathological state in a mammalian subject. Therefore, method of making the oligonucleotide derivative (as indicated in the '468 patent) is not patentably distinct from the methods of using oligonucleotide derivatives made by said process (and which is now claimed in the instant application).

Furthermore, although the claimed process of making a product is not identical to the process of making the product in the '468 patent are not identical in wording the are so close in subject matter and form such that they encompass the same processes. Thus, the instantly claimed method of making the product and the method of making the product in the '468 patent are not patentably distinct from each other.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 43, 44, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 43 reads "A method for providing an antisense oligonucleotide, the method comprising the step of providing an oligonucleotide derivative according to claim 1, the sequence of the oligonucleotide being the complement of a desired sequence." "Providing an oligonucleotide" does not constitute a clear and actual method step, thus it is unclear what

method of providing an oligonucleotide applicant is intending to encompass. Claim 44 is included in this rejection because it is dependent upon claim 43.

4. Claim 44 is also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 44 reads, "The method according to claim 43 wherein the oligonucleotide derivative which is as defined in claim 12." The claim language is incomprehensible, thus rendering the claim indefinite. Applicants are asked to review the claim and if they traverse the rejection, they are asked to explain its meaning in order to make the record clear.

# Claim Rejections - 35 USC § 112/101

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 59 and 60 provide for the use of an oligonucleotide derivative according to claim 1 as an antisense oligonucleotide, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 59 and 60 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

# Response to Arguments

- 7. Applicant's arguments filed 8/3/2009 have been fully considered. With respect to the Double Patenting rejection, it is noted that a Terminal Disclaimer has not been filed' However, Applicants have indicated that a Terminal Disclaimer may be filed in the future and ask for suspension of the rejection. In response, the rejection can not be suspended or withdrawn until a proper Terminal Disclaimer is filed.
- 8. With respect to the previous rejection of claims under 35 U.S.C. 112/101, it is noted that the claims have been amended, thus rendering the previous rejection moot. It is noted, however, that a new grounds of rejection of claims 43 and 44 are set forth herein for the reasons indicated above and that the rejection is a new grounds of rejection necessitated by the amendment to the claims.

It is noted that claims 59 and 60 are newly presented claims.

Application/Control Number: 10/696,488 Page 7

Art Unit: 1635

#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. E. ANGELL whose telephone number is 571-272-0756. The examiner can normally be reached on Monday-Thursday 7:00 a.m.-5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tracy Vivlemore can be reached on 571-272-2914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/696,488 Page 8

Art Unit: 1635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. E. ANGELL/ Primary Examiner, Art Unit 1635